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Social Science Research Techniques, Work Forms, and Research Strategies in Action Research

We take an approach to thinking about action research (AR) that argues for understanding AR as a research strategy that uses many conventional social science techniques but that orchestrates the overall research process in distinctive way. To articulate our position, we now situate AR within the broad array of general social science practices. Of course, we invite those action researchers who believe AR is a completely unique approach to research to articulate their views in writing and to respond to our way of framing these issues.

The idea that AR is separate from all existing approaches to social research cannot be justified empirically, since a reading of much of the AR literature shows us the deployment of a great many conventional social science methods. The conception of AR as an independent research practice is also historically false. The social sciences themselves began as a form of engaged political economy aimed at social betterment. Only as the social sciences were split out into the various existing conventional disciplines and subjected to harassment and purges because their social activism offended the rich and powerful did the social sciences become separated from action. Thus AR is much closer to the form and orientation of the original social sciences than the current autopoietic conventional social sciences. We view these conventional social sciences as an impoverished derivative, albeit a methodologically and theoretically sophisticated one, of the original social sciences to which we think AR is the legitimate heir.

Another defect that arises from considering AR to be a separate kind of research is that it permits action researchers who assert the uniqueness and isolation of AR to claim that they do not have to become competent in the use of the full panoply of quantitative and qualitative methods found in social

research generally. We think this is a serious matter because we believe action researchers must be competent in all major social research techniques and theories, as well as the few methods and work forms (such as search conferences, dialogue conferences, and variation matrices) that are strongly associated with particular schools of AR. Action researchers have to be more broadly trained than their conventional social research colleagues, and treating AR as a unique approach to research obfuscates this requirement.

Conventional Social Research and Action Research

To organize this discussion, we begin by paralleling our treatment of conventional social science with our presentation of AR. We say much less about conventional research because we assume the reader's familiarity with it, but we use the contrast to highlight both similarities and differences between conventional social science and AR.

We find it useful to talk about varieties of research as research strategies rather than trying to reduce them to a set of particular postulates, techniques, and aims. All forms of research involve, at minimum, individual techniques, work forms, and research strategies anchored in a set of epistemological, theoretical, and methodological assumptions.

What we discuss next would typically be captured in other books under the heading of "method" or "methodology." A standard definition of *methodology* is presented in Schwandt (1997a):

> [Methodology is the] theory of how inquiry should proceed. It involves analysis of the principles and procedures in a particular field of inquiry that in turn govern the use of particular methods. The study of methodology includes topics in philosophy of social science (*e.g.* explanation, theory, causality and so on) and philosophical anthropology (the study of human nature). (p. 93)

However, such broad philosophical orientations toward methodology are so extensive as to be impossibly vague and they also separate methodology from values. In view of this, we abandoned the notions of method and methodology and have organized our discussion differently.

We introduce three concepts and orient them specifically for use comparing AR with conventional research and in articulating core characteristics of AR. We choose to identify the concrete practices in social research as "techniques" (for example, the standard social science techniques found in conventional methodology handbooks), the linking of these techniques in the construction of learning arenas as "work forms," and the overall process of orchestrating these techniques and work forms in AR into research projects as

"research strategies." Thus, we use the term *research strategy* to identify the overall approach taken, including, techniques, epistemological positions, and the values advocated or embodied in the inquiry process. In what follows, we make a brief comparison of the deployment of techniques, work forms, and research strategies in conventional social research and in AR.

CONVENTIONAL SOCIAL RESEARCH STRATEGIES

Techniques

Conventional social research relies on techniques that, in one way or another, center on epistemologies that posit the radical separation between the researcher and the subject of the research. This separation is asserted to be possible but to be desired. The researcher is given a superior status to the research subjects by virtue of theoretical and methodological training and an education that also permits the conventional researcher to interpret what is going on in a situation on a much deeper level than any local stakeholder presumably could. This kind of interpretive autonomy of the researcher is not less true for social constructivists than it is for logical positivists.

Work Forms

This vision of conventional social research creates hermetic communities of professional social researchers and converts the rest of the world into potential research subjects. These ideas are made clearly visible in the work forms that typify this kind of research. Local stakeholders are not supposed to influence the selection of topics, techniques, hypothesis formulation, data gathering, interpretation, or the representation of the results in print. Conventional researchers, as individuals or in teams, orchestrate all dimensions of the "scientific" work process. And, by dint of the exclusion of the local stakeholders from the epistemology and work forms, the conventional researchers "own" the results because the data have been extracted from the subjects and only become meaningful when handled by the research professionals.

Research Strategies

In conventional research, there is ongoing reflection as the research process proceeds. These processes are primarily oriented around maximizing the efficiency, effectiveness, and defensibility of the data collection and analysis processes. If the reflections are shared at all, they are shared among similarly trained professionals. At the end of the project, conventional social scientists do reflect on the larger meaning and implications they think it possible to draw from the project, again in the context of a community of similarly trained

professionals. They are under no obligation to deliver the results to the research subjects themselves and generally assume that most research subjects would neither be interested in the results nor capable of understanding them. In this regard, it is particularly interesting to us that even the social constructivists have no trouble taking this relationship of superiority over the research subjects for granted.

ACTION RESEARCH STRATEGIES

Technique

In AR projects, all known social science methods are applicable, as long as they are set in a context that aligns them with the values of participative and democratic knowledge construction. From this perspective, all the social science textbooks on methodology are sources of tools to choose from.

Work Forms

AR is constituted by both social science techniques and work forms that enable the cogenerative construction of learning arenas. Action researchers regularly turn to the literatures and praxis in organizational development and change (see Cummins & Worley, 2001) and to what we already have identified as techniques generated by AR itself (for example, search conferences, dialogue conferences, and variance matrices). In Levin and Klev (2000), these approaches are identified as work forms for the construction of learning arenas.[1] In AR, we consciously make the work forms and technical methods interact throughout the entire AR project to create mutual learning opportunities for the insiders and outsiders. Technical social science methods are used to inform the choices made in learning arena construction, and analytical research methods are used to make sense of the learning emerging from the concrete change activity and to support the meaning construction process. This dialectical process between change and reflection based on social science methodology is a core dynamic of the AR research strategy.

Research Strategy

When we construct an AR project, we not only select methods but we must plan comprehensively for the social change and learning processes that will occur throughout the project. AR processes aim to create learning both for the involved problem owners and for the professional researchers. This knowledge construction, which is expected to create gains for both sides, is based on using any and all of the social science research methods available as well as the knowledge and experience of all the stakeholders in a well-managed process of

cogenerative learning. This mutuality is a core democratic value in AR, and it specifically gives voice to the participants and establishes the freedom, the right, and the obligation of the participants to take part in the knowledge generation process. It confers joint ownership and representation of the jointly created knowledge and action designs.

The Cogenerative Model

AR can be thought of as a process consisting of at least two analytically distinct phases. The first involves the clarification of an initial research question, whereas the second involves the initiation and continuation of a social change and meaning construction process. This does not mean that the problem definition process is ever final; in fact, a good sign of the learning taking place in an AR project is when the initial questions are reshaped to include newly discovered dimensions.

We can visualize the cogenerative model as shown in Figure 6.1. What follows is a thorough discussion of the elements that make up the cogenerative model.

This model identifies two main groups of actors. The insiders are the focal point of every AR project. They are the "owners" of the problem, but they are not homogeneous, egalitarian, or in any way an ideal group. They simply "own" the problem. Outsiders are the professional researchers who seek to facilitate a colearning process aimed at solving local problems and to make contributions to the scientific discourse. Insiders and outsiders are both equal and different. They are different because most insiders have to live directly with the results of any change activity in a project, whereas most outsiders can leave. Another difference is that the insiders have the central influence on what the focus of the research activity should be.

PROBLEM DEFINITION

The question to be researched must be of major importance to the participants or the process will go nowhere. Once it is established, we can gain additional leverage by using relevant bodies of professional knowledge in the field, as in the case of the organizational culture literature in the Mondragón project (see Chapter 3).

We have argued that an AR process deals with solving pertinent problems for the participants. In this respect, the whole research process emerges from demands arising outside the academy. This contrasts with conventional social science, where research problems are defined as much by developments within the disciplines as by external social forces. Yet AR professionals do not just

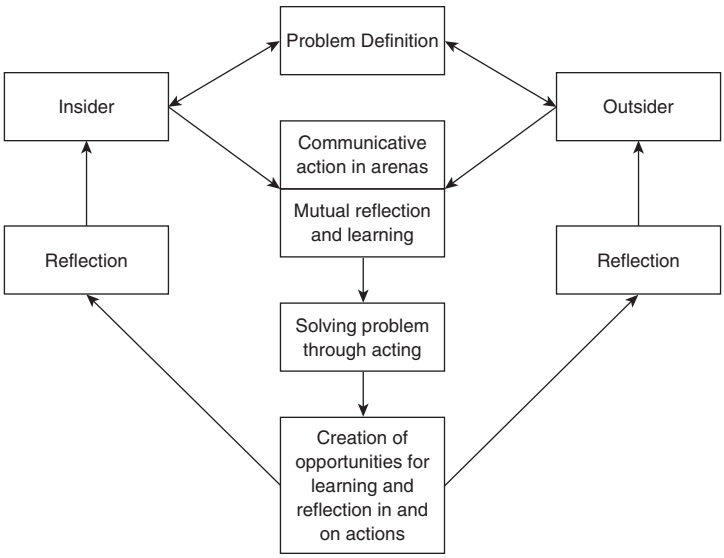

Figure 6.1 The Cogenerative Action Research Model

blindly accept any problem formulation forwarded by the local participants. We view the problem definition process as the first step in a mutual learning process between insiders and outsiders. To facilitate a process in which insider knowledge is clarified in relation to outsider professional knowledge, communication procedures must permit the development of a mutually agreed-on problem focus. These procedures include rules of democratic dialogue, which involve openness, mutual support, and shared "air time." A first working definition of the problem under study comes out of a discourse through which knowledge held by insiders and outsiders cogenerates a new, mutual understanding through their communication with each other.

COMMUNICATION ARENAS

Central to the cogenerative process in AR is its ability to create room for learning processes resulting in interpretations and action designs that participants trust. To this end, the "arena" for communication between the groups of actors must be properly configured. (See Figure 6.1.) These are locations where the involved actors encounter each other in a material setting for the purpose of carrying on AR. The arena can be a meeting between two and more people, a team-building session, a search conference, a task force meeting, a leadership group meeting, or a public community meeting. The key point is that an arena

allows communicative actions to take place in an environment structured for cogenerative learning and research.

The central challenge in any AR project is to design adequate arenas for communication about the problems of major importance to the local participants. Arenas must be designed to match the needs at issue. There is no "one-size-fits-all" approach. If the challenge is to engage a whole organization in an organizational development process, it generally is smart to gather everyone in a large room to work out the plans for a new project. However, dealing with conflicts between managers in an organization might better be addressed in a leadership group format. Selecting and structuring proper arenas depends on the professional skills and experience of the AR facilitator, and good and appropriate choices are vital for a successful AR project.

In arenas, communication between insiders and outsiders aims to produce learning and open up a process of reflection for the involved parties. These discussions and reflections are the engine for ongoing learning cycles. The initial problem focus suggests a design for an arena for discourse. The subsequent communication produces understandings that help move toward problem solutions, creating new experiences for both the insiders and the professional researchers to reflect on.

The discourses that take place in these arenas are inherently unbalanced. The insiders have a grounded understanding of local conditions far beyond what any outsider ever can gain, unless he or she settles in that specific local community or organization to live. Likewise, the outside researcher brings with him or her skills and perspectives often not present in the local context, including knowledge about how to design and run learning and reflection processes.

The asymmetry in skills and local knowledge is an important force in cogenerating new understandings as the parties engage each other to make sense out of the situation. The democratic ideals of AR research also mandate a process in which the outsider gradually lets go of control so that the insiders can learn how to control and guide their own developmental processes. These ideals also promote the development of the insiders' capacities to sustain more complex internal dialogues with a more diverse set of participants than would have been the case without this set of learning experiences.

The asymmetrical situation between outsiders and insiders (Markova & Foppa, 1991) lies at the center of complex social exchanges. The outsider designs training sessions that make transfer of knowledge possible and uses his or her influence to direct the developmental process. The professional researcher necessarily exercises power in this process. Though the outsider does not have a formal position in the local organizational hierarchy, she or he exerts influence through participant expectations that she or he play a major role in designing and managing the change processes. Dealing honestly and openly with the power those expectations grant to the researcher is a central

challenge in AR change processes. This has a significant effect on the development of local learning processes, and this power is easy to abuse.

At the beginning of a research process, the outsider makes decisions and teaches and trains local participants on topics that both consider important. At the same time, the outsider is responsible for encouraging insiders to take control of the developmental process. The professional researcher's obligation to let go of the group near the end is sometimes difficult to live up to, but often this is easier to achieve than the development of the local participants' capability to control and direct the ongoing developmental process according to their own interests.

For participants to become active players in a change process, they must exercise power. The initially asymmetrical situation between insiders and outsiders can be balanced only by the transfer of skills and knowledge from the professional researcher to the participants and the transfer of information and skills from the local participants to the outside researcher. In the end, to be sustainable, the process must be taken over by the local participants. The AR process cannot fulfill its democratic obligations unless the main thrust of the process is to increase the participants' control over ongoing knowledge production and action. Standard training in conventional social science research and the whole academic reward system focus strongly on retaining control over both the design and the execution of research activities, treating this control as a hallmark of professional competence.

The struggle to solve important local problems shapes the ground for new understandings, hence the double feedback loops in Figure 6.1. That is to say that, through actions taken as a result of the cogenerative processes, the participants learn new things about the problems they are facing, often revising their understandings in fundamental ways. The outcomes of this collective process of action and reflection support the creation of new shared understandings. The larger this shared ground is, the more fruitful the communication has been and the greater the likelihood is that further insights can be developed through reflection and actions based on this shared knowledge. This in turn can open up new ways of formulating the AR problems and thus result in ongoing learning for all parties, including the professional researcher.

FEEDBACK

The feedback loops are similar for both insiders and outsiders, but the interests they have in and the effects they experience from the communication can be quite different. For insiders, it may be central to improve their action-knowledge capabilities, whereas the outsiders may, through the reflection process, produce meaning (publications or insights) for the research community. Both of these reflective processes are then fed back into the communicative

process, further shaping the arenas for new dialogues aimed at either redefining the initial problem statement or improving the local problem-solving capacity. Cycles like this continue throughout the life of a project.

CREATING ARENAS

A major challenge in AR is to find a good first question that is at least partly shared among the involved parties, particularly at the outset. There are several obstacles to overcome. The conventional training of academic researchers generally makes them experienced debaters with lots of practice in managing conceptual models. This can create a situation of communicative domination that undermines the cogenerative process. This situation has been called "model monopoly" by Bråthen (1973). He identifies and analyzes situations where one side dominates and, through skills in communication and the handling of certain kinds of conceptual models, constantly increases the distance between insiders and outsiders. In addition, the professional's social prestige and years of formal training may convince people to accept a particular point of view too easily. When this happens, it is a serious threat to the AR process because it distracts attention from local points of view that are central to the initiation of any AR process. Skilled action researchers develop the ability to help articulate and make sense of local models and are sure they are well articulated in the communicative process.

Thus, AR is a strategy for orchestrating a variety of techniques and change-oriented work forms in an intentionally designed process of cogenerative learning that examines pressing problems, designs action strategies based on the research on the problems, and then implements and evaluates the liberating forms of action that emerge. While conventional social research is oriented around professional enlightenment, AR is oriented to achieving particular social goals, not just to the generation of knowledge to satisfy curiosity or to meet some particular professional academic need.

WHAT ACTION RESEARCHERS MAY NOT DO

Though we have asserted that any kind of social research techniques and processes are deployable in AR, there are constraints on how action researchers can operate. Certain kinds of "double-blind" methods are unacceptable if they involve purposely depriving some group of stakeholders of support or information that affects them in important ways. Controlled processes solely for the purpose of advancing professional social sciences or of satisfying the curiosity of outsiders with no benefit to local stakeholders are not permissible. Action researchers may not make demands of local stakeholders that they are not willing to make of themselves. If disclosure of interests and aims is part of the

structuring of the arena, the action researchers must also disclose their interests and aims in the situation. Action researchers may not extract or expropriate the intellectual property created in the AR process. All results are co-owned in this cogenerative process, and complex negotiations about the handling of the generated results in public and in print are a sine qua non of AR.

Action Research Is Not Merely "Qualitative Research"

We asserted at the outset that it is wrong to think of AR as "qualitative" research, yet a great many conventional researchers and far too many action researchers make this error. It is clear to us that limiting AR to qualitative research approaches is entirely unacceptable and is inconsistent with the AR enterprise itself. An AR process must use qualitative, quantitative, and/or mixed-method techniques wherever and whenever the conditions and subject an AR team deals with require. If the task at hand requires counting, sampling, factor analysis, path analysis, or regression analysis, then these techniques will be used. If issues of voice, community story, the logico-meaningful universe of discourses and culturally constructed human situations are central to an AR project, then the collaborative research will make use of the appropriate qualitative methods. Text-based database analyses (formal, informal, IT-assisted), narrative analysis, life histories, autobiographies, focus groups, interviews of all sorts, documentary analyses, and many other methods can and will be used, and many of these will be learned by and executed by nonacademic members of AR teams.

There is no logic whatsoever in claiming that AR is more in one methodological camp or another. AR is resolutely a mixed-method research strategy, so long as we understand that the particular mix of methods is contextually determined. While this might sound appealing as a principle, this places action researchers in a difficult situation because, while there have been significant improvements in the development of procedures and epistemological defenses of mixed-method research, the epistemologies and methodological discussions of mixed-method research are still relatively underdeveloped (see Miles & Huberman, 1994).

Thus AR makes heavy demands on professional social researchers. While it would be absurd to argue that action researchers must be fully competent in all social research methods, this actually is the ideal. Anything you don't know, any competence you lack and cannot learn easily is something that cannot be transmitted to the local stakeholders for use in the arena. So, realistically, action researchers must cultivate openness to all methods, make the effort to learn about them, and learn to be supportive of their deployment in AR projects whenever necessary.

Living with this sense of our own limitations is one of the key features of being a professional action researcher. As troubling as this might be, we find it infinitely better than the self-satisfied cultures of professional expertise in the conventional social sciences, where narrow mastery of some particular technique confers prestige and professional rewards. Doing AR is a constant exercise in humility.

Action research is research, not just doing "good": too often people engaged in meaningful participatory and democratizing change processes claim they are doing AR but one looks in vain for the "research" element in their projects. Participation and collaboration are often there, but there are no definable research objectives beyond data gathering and mobilization efforts. Conventional social researchers, looking at AR reports and projects, have often called attention to this (see Sørensen, 1992).

Not surprisingly, if something is to be called research, then we think it actually should *be* research. We expect the knowledge generated through an AR process to have "the texture that displays the raw materials entering into arguments and the local process by which they were compressed and rearranged to make conclusions credible" (Cronbach & Suppes, 1969). This involves a transparent process of data analysis that eventually will lead to credible knowledge, a core aim of scientific knowledge generation. The research process must be convincing for the persons that access the communications from the research. So doing good does not make a project an example of AR. There must be action and research held in a close relationship to each other in a cogenerative arena for a project to deserve the name of AR.

There clearly is a built-in tension here. AR projects owe their first allegiance to the local stakeholders and their issues. But, for AR to continue to develop and for AR research strategies and learning about effective AR to develop, the processes and results have to also take the form of credible knowledge that can be shared effectively with practitioners, researchers, and stakeholders elsewhere.

While this might sound impossible, it certainly is not. The apparent impossibility of reconciling these aims is mainly an artifact of the autopoietic and self-interested ways conventional social science has been pursued for a number of generations. In practice, the topics, complexities, techniques, interpretations, and strategies of AR projects touch on all of the major issues in the social sciences, including the major epistemological, theoretical, and methodological issue that are regularly debated. The difference is that AR does not carry on about these issues in an academic "hot house" but plays them out in the context of application with knowledgeable local stakeholders. We create socially robust knowledge of precisely the sort that current major figures in the social sciences claim as the necessary goal of the renewed endeavors of 21st century social science (Nowotny, Scott, & Gibbons, 2001).

Workability and Explanation

While many of the techniques used in AR and some of the operations that take place in AR projects are familiar to experienced social researchers, the similarity ends when it comes to workability—for example, judging the adequacy of an interpretation according to how well it works when acted on in a local context. Conventional social research shows no concern with workability at all. Instead, hermetic professional tests (statistical probability, replication, peer critique) are used to assess the quality of the results. Here, a chasm yawns between conventional research and AR, because a central focus in AR is to create trustworthy knowledge and use it to design and guide actions and evaluate the results. Workability is the central aim of any AR project, most particularly from the point of view of the local stakeholders.

This focus on workability often seems to conventional researchers to be anti-intellectual. We believe it is just the opposite. Postulating grand theories and polishing fancy methods that have no workability hardly seems to us an intellectual accomplishment. But, by the same token, what works in context is not therefore fully understood. Put another way, successful workability does not automatically create a credible understanding of why something worked; it only shows that it did work.

So when a successful a solution (or an unsuccessful solution) has been reached regarding a problem, there may well remain a set of interpretive puzzles to solve in order to make sense of the workable outcomes and to build on them both locally and for AR practitioners elsewhere. In other words, workability is a key data point, but not the endpoint of an AR process. It does, however, show that you provided a practical solution to a particular problem. Moving from workability to credible knowledge that can be shared beyond the local project requires subjecting the workable outcomes to a variety of counterfactual analyses, to searching the literature and known cases for other approaches that create similar outcomes. If other cases can be found—a clear responsibility of the professional in AR—then the local AR interpretation of why actions were taken and why they had the effects they did can be contrasted with other possible interpretations that might account for the results. In this way, an interaction among cases is created that is a core feature of the development of the professional research side of AR.

Though it might appear that this only benefits the action researcher, this is not the case. When the local stakeholders and professional researcher engage in mutual reflection and discussion about this broader credibility, they both have a stake in the process. The professional researcher needs to understand what has been learned and how to communicate it transcontextually. The local stakeholders need to be able to defend their outcomes and understandings to people outside their project whose support, financing, or understanding is

necessary for the continuation of the process they have engaged in. Both need to expand their understandings beyond the immediate context.

Conclusions

We have argued that AR is not a method but a way of collaboratively orchestrating social research processes to enhance liberating social change processes. We asserted that AR can use almost any research technique found in the sciences, social sciences, and humanities when such a technique is contextually appropriate to a collaboratively orchestrated research process. Quantitative research, qualitative research, mixed-method research, and hermeneutic dialogues all can form part of AR projects. The only research techniques ruled out in AR are those that either do not help or that actively harm the local stakeholders in the AR project. We argued that acquiring AR competence involves learning a broad array of research techniques, work forms, and learning to manage or facilitate collaborative research processes and to assist in the process of documentation and synthesis of the results and action implications. Finally, we pointed out that workability and transcontextual credibility are central features of an AR process.

Note

1. Levin and Klev (2000) devote a whole section to this discussion.